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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,151	12/19/2001	Ertugrul Berkcan	RD-28,476	8199

7590 03/15/2007  
John S. Beulick  
Armstrong Teasdale LLP  
Suite 2600  
One Metropolitan Sq.  
St. Louis, MO 63102

EXAMINER
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KARLSEN, ERNEST F

ART UNIT	PAPER NUMBER
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2829

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/15/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/026,151	Applicant(s) BERKCAN ET AL.	
	Examiner Ernest F. Karlsen	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6, 7, 9-13, 16, 17, 19-24, 26 and 28 is/are pending in the application.
- 4a) Of the above claim(s) 9, 19, 21-24, 26 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 7, 10-13, 16, 17 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Applicant's election with traverse of Group I and the species of Figure 1 in the reply filed on December 21, 2006 is acknowledged. The traversal is on the ground(s) that classification is the same and no burden would be presented in examining all claims. This is not found persuasive because Applicants have not shown that the groups are not patentably distinct. Admission on the record by Applicants that the groups are not patentably distinct will result in rejoinder. Applicants appear to be arguing that same subclass of classification means same invention. If such were carried to its logical conclusion there could only be one patent per subclass and Applicants could be denied a patent on the basis that there is already at least one patent in class 324, subclass 142. With regard to the "no burden" argument, it is noted that each distinct invention beyond one is a burden in that it draws the attention of the Examiner to its own requirements. Examination requires focus to follow search leads and patterns of logic in formulating applications of the prior art to that which is claimed. When the Examiner has to pursue several search patterns of logic simultaneously or serially, added burden is presented. In order to examine several inventions and/or species simultaneously or serially, added effort beyond that necessary for one invention or species must be expended. Where the effort is serial and the jobs are different the added burden is obvious. Digging two equal holes of the same size requires twice the effort of digging one hole. Such is an obvious conclusion. It can be argued that some inventions or species can be examined simultaneously but such is true only if they are not patentably distinct, that is, if that which applies to any one applies to all others. Where inventions or species are patentably distinct each requires separate

consideration. As a for instance, consider a properly restrictable apparatus and method of use of that apparatus where one has details without correspondence in the other. Finding references anticipating or making obvious one does not necessarily render the other unpatentable. Having to examine the other constitutes a burden. If the apparatus and method of the above example are not patentably distinct no burden is presented in examining both since if one falls the other falls as well. As a second for instance, consider a properly restrictable combination and subcombination where all the details of the subcombination are not necessary for the combination. Finding references anticipating or making obvious one does not necessarily render the other unpatentable. Having to examine the other is a burden. If the combination and subcombination of the above example are not patentably distinct no burden is presented in examining both since if one falls the other falls as well. Admission on the record that the groups are not patentably distinct will result in rejoinder. Admission on the record that the identified species are not patentably distinct will result in rejoinder of the species.

The requirement is still deemed proper and is therefore made FINAL.

Claims 9, 19 and 21-24, 26 and 28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention and/or species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on December 21, 2006.

Claims 1-3, 6, 7, 10-13, 16,17 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contain subject matter which was not described in the specification in such a way as to enable

one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear how plural Hall devices would be placed in the slot of the conductor 16 of Figure 2 to produce the desired result. No disclosure is present explaining how to configure each Hall effect device to detect the predetermined shape of the magnetic field. The Examiner is not aware that a Hall effect device can detect a predetermined shape of a magnetic field. It is also not clear what is meant by saying the magnetic fields have shapes. A disk of zero thickness would have a particular two dimensional shape. A ball has a shape in three dimensions. It is not clear how a magnetic field would have a shape. It is further not clear how the Hall effect devices would be configured to be insensitive to fields other than the fields of predetermined shape. It is not clear what the predetermined shape would be that the Hall effect devices would sense. It is not clear from the specification how the Hall devices of Figure 1 are to be positioned in the slot of Figure 2, or indeed, if they are to be positioned in the slot of Figure 2. The specification states in paragraph 0011 that the current in conductor 16 is divided into two equal components. It would appear that such would result in equal and opposite fields in slot 32 which would cancel resulting in a zero field. How the sensor of Figure 1 could detect a zero field is unclear. It is unclear how the circuitry of Figure 4 is structured. Some elements are not connected to anything. It is not clear what the lower structure of Figure 2 is supposed to represent.

Claims 1-3, 6, 7, 10-13, 16, 17 and 20 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what is meant by

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the conductor being configured to generate a magnetic field having a predetermined shape, the Hall effect device being configured to detect a magnetic field of predetermined shape or the Hall effect device being configured to be insensitive to magnetic fields having shapes other than the predetermined shape.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6, 7, 10-13, 16, 17 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ladds. With regard to claims 1, 3, 7, 10 and 20. Ladds shows a current sensor in Figures 6-9 having a plurality of Hall effect devices H1, H2, a conductor C that generates a field of a particular shape where each Hall effect device is configured to detect a field of a particular shape and be insensitive to fields of other shapes. With regard to claims 2, 11-13, 16, 17 and 20 Ladds discloses use of his device in a watt-hour meter at column 1, lines 1-10, column 2, lines 40-45 and in claim 17. With regard to claims 6 and 16 all Hall effect devices are temperature responsive and thus having a non-linear component is inherent.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References cited but not applied are cited to show additional apparatus similar to that of Ladds.

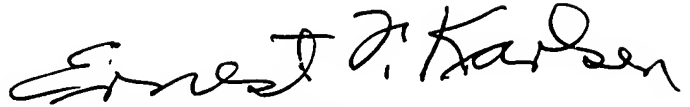
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Any inquiry concerning this communication should be directed to Ernest F.

Karlsen at telephone number 571-272-1961.

Ernest F. Karlsen

March 6, 2007

A handwritten signature in black ink, reading "Ernest F. Karlsen". The signature is written in a cursive style with a large, stylized "E" and "K".

ERNEST KARLSEN  
PRIMARY EXAMINER